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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/874,060 | 06/06/2001 | Masanori Toyofuku | 209241US0 | 5644 |

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

| EXAMINER | |
|---|---|
| SERGENT, RABON A | |
| **ART UNIT** | **PAPER NUMBER** |
| 1711 | 12 |

DATE MAILED: 01/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-12

| Application No. | Applicant(s) |
|---|---|
| 09/874,060 | Toyofuku et al. |
| **Examiner** | **Art Unit** |
| Rabon Sergent | 1711 |

# Office Action Summary

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *three* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on *Nov 12, 2002*.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-7* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 218881 in view of JP 3-229773.

EP 218881 discloses non-porous, moisture permeable polyurethane coating compositions comprising the reaction product of an isocyanate terminated prepolymer and a curing agent. The prepolymer is prepared by reacting a polyisocyanate, preferably an aromatic polyisocyanate, and a blend of polyols, wherein the blend comprises 50%-98% by weight polyoxyethylene polyol having a functionality of at least three and 2%-50% by weight polyoxyethylene diol, wherein the total

ethylene oxide content is at least 70% by weight. Furthermore, at the disclosed molar ratio of the polyol to diol, the blend's average functionality overlaps that claimed by applicants.

3. Though the primary reference's blend's average functionality range is broader than that of the instant invention, the position is taken that it would have been obvious to operate at the upper end of the reference's functionality range, because one would have expected the increased crosslink density resulting from using an increased functionality blend to reduce swelling of the films. Furthermore, though the primary reference discloses the preferred use of aromatic polyisocyanates, the reference fails to indicate that diphenylmethane diisocyanate is a preferred polyisocyanate. However, the use of diphenylmethane diisocyanate as a reactant for producing prepolymers for similar non-porous, moisture permeable polyurethanes was known at the time of invention. See JP 3-229773. The secondary reference discloses that films produced using diphenylmethane diisocyanate have a good balance of elongation and mechanical strength and possess good flexibility. In view of these teachings pertaining to obtaining enhanced properties, the position is taken that it would have been obvious to utilize diphenylmethane diisocyanate as the aromatic polyisocyanate of the primary reference, so as to arrive at the instant invention.

4. Applicants have argued that their showings of unexpected results, attributable to the use of diphenylmethane diisocyanate and the claimed functionality range of the polyoxyalkylene polyol mixture, rebut the *prima facie* case of obviousness. The examiner has carefully considered the relied upon showings, set forth within Table 1, in conjunction with applicants' arguments; however, applicants' arguments fail to adequately distinguish the results obtained from the instant

invention from the results set forth within Example 3 (Despite remarks to the contrary within the specification at page 15, Example 3 does not correspond to the subject matter of the instant claims, because the claimed average functionality range excludes 3.0; therefore, Example 3 is considered to be a comparative example). Though Example 3 lacks the minor diol component of the primary reference, Example 3 and the combined teachings of the prior art references are considered to be sufficiently similar in terms of diisocyanate species, average hydroxyl functionality, and oxyethylene content that the results set forth within Example 3 can reasonably be expected to closely approximate the results one would obtain from practicing the prior art, as set forth by the examiner. Given this position, the examiner takes the additional position that the properties set forth for Example 3 are sufficiently close to the properties of Examples 1 and 2 that Example 3 fails to be demonstrative of unexpected results sufficient to overcome the prior art rejection, without further elaboration.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (703) 308-2982.

RABON SERGENT
PRIMARY EXAMINER

R. Sergent

January 26, 2003